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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,853	08/02/2001	Tomonari Sendai	Q65690	5663

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EXAMINER
HANNAHER, CONSTANTINE

ART UNIT	PAPER NUMBER
2878	

DATE MAILED: 05/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application N .	Applicant(s)	
	09/919,853	SENDAI ET AL.	
	Examiner	Art Unit	
	Constantine Hannaher	2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondenc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *2-4,6-10 and 16-18* is/are allowed.

6)☒ Claim(s) *1,5 and 12* is/are rejected.

7)☒ Claim(s) *11,13-15 and 19* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 August 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 5, and 12/5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (US006070096A) in view of Graessle *et al.* (US005334841A) and Cline *et al.* (US006462770B1).

With respect to independent claim 1, Hayashi discloses a method of displaying a fluorescent light image corresponding to the illustrated apparatus (Fig. **6**) which would comprise the steps of irradiating a target area **10** with an illuminating light **L2** and an excitation light **L1** that has been emitted from an excitation light emitting means **111** and guided **106** to the target area **10**, obtaining, by use of a single image obtaining means **120** provided with separate image obtaining portions for obtaining a fluorescent light image **140** and a standard image **130** of the types recited, and displaying

160 a fluorescent light image and a standard image. Hayashi does not disclose any preparations for malfunction. Nevertheless, those of ordinary skill in the art of detecting fluorescence know from Graessle *et al.* that verification of the energy source which excites the target material is important (column 4, lines 60-65). Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method disclosed by Hayashi to further include a step of detecting that an operational irregularity had occurred in the excitation light emitting means **111** as suggested by Graessle *et al.* in view of the desirable notice to the operator that a malfunction had occurred. Although Graessle *et al.* suggests only the provision of an alarm, Cline *et al.* discloses that the image obtaining portion for the fluorescent light image must be protected when not in use obtaining a fluorescent light image (column 11, lines 29-37), so it would have been obvious to one of ordinary skill in the art at the time the invention was made in response to a detection signal of operational irregularity in the excitation light emitting means **111** of Hayashi as suggested by Graessle *et al.* to switch the image obtaining means to a standard image obtaining mode (by movement of mirror **121** in Hayashi by analogy to mirror **186** in Cline *et al.* (Fig. **6**). Once mirror **121** was so set, the steps of emitting the illuminating light **L2** from source **118**, obtaining the standard image from portion **130**, and displaying **160** the standard image would not take more than ordinary skill in the art in view of the continued utility of the method achieved thereby.

With respect to independent claim 5, Hayashi discloses an apparatus (Fig. **6**) for displaying a fluorescent light image comprising a an excitation light emitting means **111** for emitting an excitation light **L1**, illuminating light emitting means **118** for emitting an illuminating light **L2**, light guiding means **106** for guiding the excitation light **L1** and the illuminating light **L2** to a target area **10**, a single image obtaining means **120** provided with separate image obtaining portions for obtaining a fluorescent light image **140** and a standard image **130** of the types recited, display means **160** for

displaying a fluorescent light image and a standard image, and an image display controlling means **158**. Hayashi does not disclose any preparations for malfunction. Nevertheless, those of ordinary skill in the art of detecting fluorescence know from Graessle *et al.* that verification of the energy source which excites the target material is important (column 4, lines 60-65). Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus disclosed by Hayashi to further include an excitation light irregularity detecting means for detecting that an operational irregularity had occurred in the excitation light emitting means **111** as suggested by Graessle *et al.* in view of the desirable notice to the operator that a malfunction had occurred. Although Graessle *et al.* suggests only the provision of an alarm, Cline *et al.* discloses that the image obtaining portion for the fluorescent light image must be protected when not in use obtaining a fluorescent light image (column 11, lines 29-37), so it would have been obvious to one of ordinary skill in the art at the time the invention was made in response to a detection signal of operational irregularity in the excitation light emitting means **111** of Hayashi as suggested by Graessle *et al.* to have the apparatus comprise a standard image display controlling means for causing the image obtaining means to switch to a standard image obtaining mode (by movement of mirror **121** in Hayashi by analogy to mirror **186** in Cline *et al.* (Fig. **6**). Once mirror **121** was so set, the causing of emitting the illuminating light **L2** from source **118** and displaying **160** the standard image would not take more than ordinary skill in the art in view of the continued utility of the apparatus achieved thereby.

With respect to dependent claim 12/5, the display means **160** in the apparatus of Hayashi is a single apparatus that switches between the standard image and the fluorescent light image (but may overlay them when necessary, column 25, lines 32-36).

Response to Submission(s)

4. This application has been published as US2002/0014595A1 on February 7, 2002 and elsewhere at a similar date.

Allowable Subject Matter

5. Claims 2-4, 6-10, 11-15 (insofar as they depend upon one of claims 6-10), 16-18, and 19 (insofar as it depends upon one of claims 6-10) are allowed.

6. Claims 11, 13-15, and 19 (insofar as they depend upon claim 5) are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: although Graessle *et al.* discloses detection of reference light it is guided to target **34** rather than any target area **24**; addressing an operational irregularity in any image obtaining portion is not suggested and Cline *et al.* would lead one of ordinary skill in the art to avoid the combination of illuminating light and image obtaining portion normally devoted to obtaining a fluorescent light image; in the combinations of steps and elements, setting the control line states and detecting disconnection is not suggested, addressing an operational irregularity in the image display controlling means is not suggested, a dual display apparatus is not suggested, and a semiconductor laser of specific formula is not suggested.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Constantine Hannaher whose telephone number is (703) 308-4850. The examiner can normally be reached on Monday-Friday with flexible hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David P. Porta can be reached on (703) 308-4852. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

ch
May 19, 2003

Constantine Hannaher
Primary Examiner